



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	Ms_IJBCRR_26369
Title of the Manuscript:	The inhibitory potentials of seed kernel methanol extract of Mangifera indica L. anacardiaceae and fractions on metalloprotease-induced toxic effect from Echis ocellatus venom
Neew title:	The inhibitory potentials of seed kernel methanol crude extract and fractions of Mangifera indica L. Anacardiaceae on metalloprotease-induced toxic effect of <i>Echis ocellatus</i> venom.
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Please correct as follow :- Materials and Methods Line 51: was protein concentration determined for the venom collected? Normally protein determination used to measure the amount of venom instead of weighing them. Line 53: What is the voucher number once specimen deposited in a herbarium? Line 57: methanol extraction can lead to extraction of tannins and tannins (polyphenols) been known to non-specifically bind to proteins or other macromolecules. As venom known to contain majority of lethal proteins the neutralization can be due to this non-specific binding and neutralization of the venom. Suggested to review this non-specific binding and include within the discussion if the results may been due to tannins rather than specific inhibitory effects on the metalloprotease present. Line 61: How specifically the researchers focussed on the metalloprotease present in the venom without performing any protein purification technique? Line 65 and Line 75 and Line 80: These three segments provided impressions the experimental animals used of confusion. Reviewer suspects the actual animal used was rats as Wistar normally related to rats. In line 75, reviewer surprised if a mouse was used it is unlikely to provide 2 ml of blood and lastly, in line 80, researcher wrote rats instead of mice. Please be certain of the animal used and write accordingly. Line 78-83 and Line 84-90: Reviewer is concerned the techniques used on the experimental animals are not acceptable currently if to be approved for animal ethics by any IACUC. It is therefore assumed the researcher did not obtain any animal ethics approval (as none being mentioned within the text). The reviewer therefore left it to the journal management decision if still acceptable if no animal ethics approval was ever been sort before the research work been conducted. The reviewer therefore request the researcher to identify one latest journal publication still employing such techniques and being approved for animal ethics? Line 92: Reviewer request the researcher provide reference this technique been taken from due to the unorthodox method described.	



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Line 100: the statement....."5ml of reagent...." What is "reagent" here?

Line 102:"using standards".....what standards used?

Line 103: provide reference for this technique taken from?

Line 109: Explain how total protein can be obtained accurately using refractometer?
Normally a dye such as Bradford and a standard curve used to obtain protein measurements.

Line 114: need more information how the researcher calculated the "activity" (micro mol/min)? and also the % inhibition i.e for example 58% is based on what control? Also explain how the methanol extract provided lower % inhibition compared to the ethyl acetate if the latter been extracted from the former? Has all extracts been quantitated to be same concentration used throughout this experiment?

Line 119: The table is based on observation that is not done with a proper rubrics i.e if there is swelling the researcher is requested to provide degree of swelling for e.g – no swelling; + mild swelling; ++ swelling ; +++ severe swelling for better classifications. Do the same for all other observations.

Line 132 till 136: in both Table 3 and Table 4, the use of "low" and "high" not encouraged for a scientific study as not measurable. Reviewer request researcher determines LD50 or MLD of venom and use instead.

Discussion

Line 162: The researcher to make a statement the metalloprotease been inhibit may not be accurate unless the total metalloprotease been firstly fractionated or performed a very specific experiment related to the metalloprotease itself?

Line 177-185: reconsider to include until a proper action been done for the observations as suggested earlier or else this outcome not very relevant to conclude.

Ethical issue: One is the animal ethics approval by a proper IACUC.

Reviewer Details:

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